

VI.) WHAT IS CLAIMED OF PROPRIETARY INVENTIVE ORIGIN IS:

1 ☆ 1.) An endosseous dental-implant of helically-anchoring type providing simplified high-strength construction; said dental-implant comprising:

5 a primary-implant having a longitudinal-axis and external male/screw-threaded medial portion proximal a lower-terminus means for entering a pilot-hole provided in recipient's alveolar-bone, and including an imperforate sidewall extending from above said medial portion to proximally the opposite upper-terminus thereof where a radial perimeter-shoulder means forms a bearing-surface for laterally stabilized engagement by an interfacing radial-surface of a mating abutment-post means, and including a coaxial longitudinal internal shaft having female/screw-threaded retention means formed down into
10 said upper-terminus, plus an abaxial female/indexing-hole means is formed vertically into said perimeter-shoulder for precise vertical registration with a male/key-pin tool means by which to impart bidirectional rotation, and said abutment-post including an abaxial female/indexing-notch means likewise arranged for precise registration with said male/key-pin tool which can be similarly engaged thereto for tightening/loosening of said abutment-
15 post relative to said primary-implant.

1 2.) The dental-implant apparatus according to Claim-1, wherein said perimeter-shoulder is formed radially slightly divergent from said interfacing radial-surface of an adjoining said abutment-post means, said divergence thereby forming a radial declivity there between the two adjoining radial surfaces, assuring that said abutment-post radial-
5 surface outermost perimeter edge impinges initially upon the adjoining outermost edge portion of said perimeter-shoulder, whereupon a slight hyper-sweging deformation condition is induced as the opposed said surfaces become progressively mated according
8 to the cinching torque imposed upon said abutment-post.

3.) The hyper-sweging arrangement according to Claim-2, wherein said generally radial-surface portion is formed to a positive-chamfer of approximately 1-3 degrees.

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4.) The hyper-swinging arrangement according to Claim-2, wherein said male/key-pin tool includes a longitudinal coaxial pilot-lug and a key-pin means rotatable within an eccentric-bore via a leverarm, said key-pin thereby exerting a lateral pinching action.

5.) The dental-implant apparatus according to Claim-1, wherein said perimeter-shoulder is formed annular to a tapering circular-cavity portion formed concentricly above said female/screw-threads, the taper of said female/circular-cavity being formed to interface with an adjoining tapering male/circular-boss portion formed upon the underside of said secondary abutment member means, said tapering surfaces merging intimately to attain a super friction-lock of said abutment member means down upon said adjoining primary implant as the opposed said surfaces become progressively tenacious according to the degree of tightness imposed upon one another; thereby creating a joint exceptionally resistive to loosening.

6.) The frictional interlocking arrangement according to Claim-5, wherein said taper is approximately 1-5 degrees.

7.) The dental-implant apparatus according to Claim-1, wherein said male/screw-threading is of an undercut negative/buttress-thread configuration, thereby presenting a shore-stabilized screw-thread surface-area ultimately resistant to compressive biting-loads.

★ 8.) An endosseous dental-implant of helically-anchoring type providing simplified high-strength construction; said dental-implant comprising:

a primary-implant having a longitudinal-axis and external male/screw-threaded medial portion proximal a lower-terminus means for entering a pilot-hole provided in recipient's alveolar-bone, and including an imperforate sidewall extending from above said medial portion to proximally the opposite upper-terminus thereof where a radial perimeter-

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7 shoulder means forms a bearing-surface for laterally stabilizing engagement by the
interfacing radial-surface of a separable abutment-post means, said primary-implant
including a coaxial longitudinal internal shaft having female/screw-threaded retention
10 means formed down into said upper-terminus, including an abaxial female/indexing-void
means formed internally below proximal said perimeter-shoulder for receiving vertical
downward precise registration of a mating male/indexing-lug means provided upon
underside of separate said abutment-post means, thus placing said abutment-post in fixed
orientation to said primary-implant and able to thereby convey bidirectional rotational-
15 torque upon said primary-implant via application of a standard dental-wrench to utility-
stud; plus, a coaxial retention-screw is finally installed into said female/screw-threads
locking said abutment-post down intimately indexed upon said primary-implant.

1 **9.)** The hyper-sweging arrangement according to Claim-8, wherein said
perimeter-shoulder is formed radially slightly divergent from said interfacing radial-surface
of an adjoining said abutment-post means, said divergence thereby forming a radial
declivity there between the two adjoining radial surfaces, assuring that said abutment-post
5 radial-surface outermost perimeter edge impinges initially upon the adjoining outermost
edge portion of said perimeter-shoulder, whereupon a slight hyper-sweging deformation
condition is induced as the opposed said surfaces become progressively mated according
to the cinching torque imposed upon said abutment-post for a critically imperforate
9 perimeter joint-seam.

10.) The hyper-sweging arrangement according to Claim-9, wherein said generally
radial-surface portion is formed to a positive-chamfer of approximately 1-3 degrees.

11.) The hyper-sweging arrangement according to Claim-9, wherein generally
circular said perimeter-shoulder portion is formed to a positive-chamfer of approximately
1-3 degrees, thereby helping elevate the perimeter-joint above recipients alveolar-bone.

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1 **12.)** The dental-implant apparatus according to Claim-9, wherein said perimeter-
shoulder is formed annular to a tapering circular-cavity portion formed concentricly above
said female/screw-threads, the taper of said female/circular-cavity being formed to
5 interface with an adjoining tapering male/circular-boss portion formed upon the underside
of said secondary abutment member means, said tapering surfaces merging intimately to
attain a super friction-lock of said abutment member means down upon said adjoining
primary implant as the opposed said surfaces become progressively tenacious according to
the degree of tightness imposed upon one another; thereby creating a joint exceptionally
9 resistive to loosening.

13.) The frictional interlocking arrangement according to Claim-12, wherein said
taper is approximately 1-5 degrees.

14.) The dental-implant apparatus according to Claim-8, wherein said
male/screw-threading is of an undercut negative/buttress-thread configuration, thereby
presenting a shore-stabilized screw-thread surface-area ultimately resistant to
compressive biting-loads.

15.) The dental-implant apparatus according to Claim-8, wherein said abutment-
post includes an upward extending quad-shaped utility-stud.

16.) The dental-implant apparatus according to Claim-8, wherein said abaxial
female/indexing-void means and said abaxial male/indexing-lug portions can be formed to
a symmetrically balanced stress-relieved 180-degree opposed oval-shaped mating cross-
section.

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1 ★ 17.) An endosseous dental-implant of helically-anchoring type providing simplified
high-strength construction; said dental-implant comprising:

5 a primary-implant having a longitudinal-axis and external male/screw-threaded
medial portion proximal a lower-terminus means for entering a pilot-hole provided in
recipient's alveolar-bone, and including an imperforate sidewall extending from above said
10 medial portion to proximally the opposite upper-terminus thereof where a radial perimeter-
shoulder means forms a bearing-surface for laterally stabilizing engagement by an
interfacing radial-surface of a separable abutment-post means, said perimeter-shoulder
formed radially slightly divergent from said interfacing radial-surface of adjoining said
15 abutment-post means, said divergence thereby forming a radial declivity there between
the two adjoining radial surfaces, assuring that said abutment-post radial-surface
outermost perimeter edge impinges initially upon the adjoining outermost edge portion of
said perimeter-shoulder, whereupon a slight hyper-swinging deformation condition is
induced as the opposed said surfaces become progressively mated according to the
20 cinching torque imposed by said abutment-post, thereby creating a critically imperforate
perimeter joint-seam, and said primary-implant including a coaxial longitudinal internal
shaft having female/screw-threaded retention means formed down into said upper-terminus
whereby a male/screw-threaded integral shank extending from underside of said abutment-
post enables said abutment-post is secured therein via application of a separate standard
25 dental-wrench to utility-stud of said abutment-post, thereby finally engaging said radial-
surface tightly down upon said perimeter-shoulder.

1 18.) The dental-implant apparatus according to Claim-17, wherein said
perimeter-shoulder is formed annular to a tapering circular-cavity portion formed
concentricly above said female/screw-threads, the taper of said female/circular-cavity
4 being formed to interface with an adjoining tapering male/circular-boss portion formed

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5 upon the underside of said secondary abutment member means, said tapering surfaces
merging intimately to attain a super friction-lock of said abutment member means down
upon said adjoining primary implant as the opposed said surfaces become progressively
tenacious according to the degree of tightness imposed upon one another; thereby
9 creating a joint exceptionally resistive to loosening.

19.) The hyper-sweging arrangement according to Claim-18, wherein said
generally radial-surface portion is formed to a positive-chamfer of approximately 1-3
degrees.

20.) The hyper-sweging arrangement according to Claim-18, wherein generally
circular said perimeter-shoulder portion is formed to a positive-chamfer of approximately
1-3 degrees, thereby helping to elevate the perimeter-joint above recipients alveolar-bone.

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